

TEST

AMO Grade 5 Mock Test Paper 2

QUESTIONS

SECTIONS

1. Section A MCQs - 15 Questions
2. Section B Integers - 10 Questions

Section 1 : Section A MCQs - 15 Questions

1 Brenda multiplies a number by 3, adds 3, divides by 3, adds 6, and subtracts 3 from the result to get 9. What is six times the original number?

- ☐ 5
- ☐ 3
- ☐ 30
- ☐ 54
- ☐ 126

Correct: +4

2 What is the least number of 2-digit numbers that must be added to get the sum of 2021?

- ☐ 20
- ☐ 21

☐ 202

☐ 203

☐ 1011

Correct: +4

3 Which of the following is true?

☐ If a circle and a regular octagon have the same area, the length of the radius of the circle will be equal to the distance between the centre and a vertex of the octagon.

☐ The difference between the number of sides of an octagon and a trapezium is a prime number.

☐ All regular quadrilaterals have sides of equal length.

☐ Four more than the number of sides of a decagon is the same value as the total number of sides of a figure that is formed by placing two identical regular heptagons next to each other.

☐ The area of only right-angled triangles is given by $(base \times height) \div 2$.

Correct: +4

4 What is the average of the sum of the first 4 counting numbers and the sum of the first 5 even numbers?

☐ 10

☐ 20

☐ 30

☐ 40

☐ 4.5

Correct: +4

5 One-fifth of all apples in a basket are red. Three-fourths are yellow. The remaining are green. If there are 200 apples in the basket, how many of them are green?

☐ 10

☐ 40

☐ 160

☐ 190

☐ None of the above

Correct: +4

6 Amanda's score was twice Brian's score. Cassie scored 5 points less than Brian. Dora scored 10 points more than Amanda. Dora's score was 6 times as much as Cassie's. Whose score was 10?

☐ Amanda

- ☐ Cassie
- ☐ Dora
- ☐ None of the above

Correct: +4

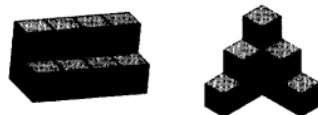
The largest 4-digit number A is formed by using all the digits 4, 5, 0 and 3. The smallest 4-digit number B is formed by using all the digits 4, 5, 0 and 3. Find the value of $A - B$.

7

- ☐ 2385
- ☐ 2376
- ☐ 2358
- ☐ 2349
- ☐ None of the above

Correct: +4

The 2 figures below are made up of 3 cm cubes. What is the total volume of both figures?



8

- ☐ 12 cm^3

☐ 27 cm³

☐ 567 cm³

☐ 81 cm³

☐ 48 cm³

Correct: +4

9 Each digit of a 4-digit PIN code can be any digit from 0 to 9. How many possible 4-digit PIN codes are there?

☐ 10000

☐ 256

☐ 40

☐ 6561

☐ 10

Correct: +4

10 What is the largest 3-digit number which is divisible by 32?

☐ 999

☐ 996

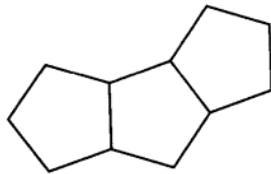
☐ 984

☐ 992

☐ 968

Correct: +4

The figure below is made of three regular pentagons with a length of 3 cm. What is the perimeter of the figure?



11

☐ 12cm

☐ 6cm

☐ 45cm

☐ 33cm

☐ None of the above

Correct: +4

What is the 2021st number in the sequence below?

7, 9, 11, 13, ...

12

☐ 2028

☐ 4041

☐ 4047

☐ 4050

☐ 4042

Correct: +4

13 Which of the following numbers has the most number of even prime factors?

☐ 182

☐ 442

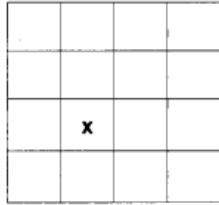
☐ 128

☐ 100

☐ 400

Correct: +4

The following picture shows a 4×4 square. How many squares of any size are there comprised of the one marked with **X**?



14

☐ 1

☐ 4

☐ 5

☐ 10

☐ 16

Correct: +4

15 A number p is 1.5 times another number q . If p is 18 bigger than q , then what is $p + q$?

☐ 18

☐ 36

☐ 54

☐ 108

☐ 90

Correct: +4

Section 2 : Section B Integers - 10 Questions

- 16 A $5 \times 5 \times 5$ cube is painted red on all its faces. Find the number of smaller $1 \times 1 \times 1$ cubes with at most two faces painted.

Correct: +5

- 17 The sum of 5 different non-zero whole numbers is 45. What is the largest possible value of the largest number among these 5 numbers?

Correct: +5

- 18 Tom read a book with 2022 pages. How many digits were used to print the page numbers on the book?

Correct: +5

- 19 The 5-digit number 653A2 is a multiple of 3. How many possible digits A are there?

Correct: +5

- 20 A five-digit number is formed such that it satisfies the following conditions:
- It is a multiple of 3 and 5.
 - The third digit is half the first digit and one less than the second digit.
 - The sum of the first three digits is 13 and the sum of the last three digits is 8.
 - The fourth digit is the second largest digit of that number.
- Find the sum of digits of the 5-digit number.

Correct: +5

Correct: +5

A train travelling at 54 km/h passes a platform. A man is standing on the platform, and the train passes the man in 20 seconds. Find the length of the train, in metres.

22

Correct: +5

Find the sum of the numbers in the 101st group of the following sequence:

23

(1, 4, 6), (2, 6, 10), (3, 8, 14), ...

Correct: +5

24

A 4-digit number $AABB$ is a perfect square. What is the square root of $AABB$?

Correct: +5

The sum of two whole numbers A and B is 1085. The highest common factor of these 2 numbers is 35. Find the value of $\frac{A+B}{35}$.

25

Correct: +5

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ANSWERS

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Section 1 : Section A MCQs - 15 Questions

1 30

2 21

3 All regular quadrilaterals have sides of equal length.

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5 10

6 Brian

7 2385

8 567 cm^3

9 10000

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